

SEQUENCE LISTING

<110> METAMORPHIX, INC.
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<120> COMPOSITIONS AND METHODS FOR DETERMINING CANINE GENDER

<130> MMI1130-1

<150> US 60/439,188

<151> 2003-01-10

<160> 99

<170> PatentIn version 3.1

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<213> Artificial sequence

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 aagacagtac aagatc 76

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 <212> DNA
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 <212> DNA
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 cagtttgagc ta 72

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aaattagggg ttaaaacagt atgagatc 148

<210> 21

<211> 142

<212> DNA

<213> Homo sapiens Y

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<212> DNA

<213> Canis familiaris X consensus

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tggtaaactt tagggtttaa gacagtacia gatcagatgt cctcaaatgt ctctgtgttt 180

aagaaacact tggaagagct tggtataaaa aaaaatatat tcccagatgc ctccacccaa 240

gactgattca gtagagcagg agtgggggga gtgcccagga ctctgcattt taacaagcac 300

ctcaggagat tctgtggaga caattaactt gttaaataca tgcgccatct ctagatggag 360

gaaactttta gaagggacct ttgaaaggcc tccagagaaa gtgctcgaac agcttaggca 420

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tctgcctc ca 492

<210> 23

<211> 680

<212> DNA

<213> Canis familiaris Y consensus

<400> 23

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aaaatttcca atttccaatt tcacaagctt ggaaataaaa atctgcctca gatttttatt 120

tagggttaaa ttaagggtt taagacagta caagatctga tggtcacaaa tgtgactgtg 180

tttaagaac atttttaaaa tcttgatcac aagattttta aacaaaaaca ttctcagttg 240

ccttcacca tattctgatt cagtatagcc agagtggggg gtgtgctgag aactctgaat 300

tttaacaagc aagaacctca ggaaattctt ggaaacaatt acttataatc actcatctct 360

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ctctttctgc tcagaaaacc cccgggctat cattcttcag agtaagattt cagtgttagg 540
aatttccttc ctgaactatt tatttgctag tcacctgcta agcagatgac ttcctattgg 600
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ggtaactgag agacagacac 680

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<210> 24
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<213> Homo sapiens X

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<210> 25
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<212> PRT
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<400> 25

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Met Pro

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<210> 26
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<212> DNA
<213> Homo sapiens Y

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aaaa 64

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<210> 27
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<400> 27

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1           5           10          15

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Met Pro

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 aaaa 64

<210> 29
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 <212> PRT
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Met Pro

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<210> 31
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Met Pro

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 gacatattgt attagattca ggtgtacagc atagtgattc aggtgtacag catagtgatt 180
 caacaattaa atgcacttca acattaaana atgcctcacc atgttaagtg tagttacat 240
 ctgtcacat ac 252

<210> 33
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 <212> DNA
 <213> Canis familiaris

<400> 33
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 gtgtgcaaat aaaagtaaaa ttataaagca tgctatcttg tttccacag catttctaaa 120
 ttttatttat ttatttat ttatttat ttatttat ttatttat ttatttat ttatttat 180
 aatgacaatg ttgtatacag tgaaacctct cattaatttg aaaaacagca aaga 234

<210> 34
 <211> 279
 <212> DNA
 <213> Canis familiaris

<400> 34
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 agcactgggt gttatactat atgttggaac atcgaacttc aataaaaaaa agaagaaaga 120
 aagaagaaag aaggaaagag aaagaaaaag aaagaaagaa agaaagaaag aaagaaagaa 180
 agaaagaaag aaagaaagaa agaaaacctt tcaaacttct agtttgacaa tgcaattgtg 240
 tattaggaaa gggagttgca atatatagac ctctccaga 279

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 <212> DNA
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<220>
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 <222> (10)..(10)
 <223> n is any nucleotide

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 cttttctcaa ataccagac tctaaagtgg caacattaa tatgctaact ccatttaaaa 120
 gtgccatttg agggcagccc tgggtggctca gtggtttagc gctgcctaca gcctagggcg 180

tgatcctgga gacctgggat tgagtccac gtcgggctcc ctgcatggag cctgcttctc	240
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aaataaataa ataaatctta aaaaaaaaaat agaagtgccca tttgatgtct tcatctattg	360
atgactcaat caagtttatt atctacttca agttgctcta gctgaaatca agagtcggga	420
cgctcaacca agtgagccct ccagggtaccc cacaaatggt gatagttcaa acttt	475

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 <212> DNA
 <213> Canis familiaris

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aatatgaagg taaacatatc gactttatca ctgtgggagg ctaaattgga ggtgtacttt	180
gtctttctcc tttctttctt tctttctttc tttctttctt tctttctttc tttctttctt	240
ttgctttttg ttagattgtg tttatttatt tgagagaaag agagtggagg gaggggcaga	300
ctgagagggga gaagtagact ccatggtgag cagggagcct gatgagacat gaggctccat	360
cccaggaccc tgggaccata acctgagcta tttctctga acaaaggcac tgctgaggta	420
gttcaag	427

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 <211> 454
 <212> DNA
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<400> 37	
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tttttccaaa acgaaagaaa gaaaaaaaaa gacccaaaaa agaaaaaaag aaaagaaaaa	180
gaaagaaaga aagaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga aagaaaaaga	240
aagaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga	300
aagaaaagtg aattagaact catthtatctt tgttaacttt cctcattggt ggataactgt	360
accggtgtta ttttaaggaaa tactattgaa gtatgccggg gaacaggacc atgatgtcta	420
ccacttattc tcaagtgggt tggagaaaaa gaat	454

<210> 38
 <211> 394
 <212> DNA

<213> Canis familiaris

<400> 38

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tattaatgat attttagata gtaatttcca gttctgcatt catatcagaa tttaatgttt      60
aaaaactata ctgtataaaa acctgccttt gtaaagttaa gaaaatattg ggtatatact      120
ttggatgaat ggatggagaa gaaacttatt ttatatgatt ttaaaagtggt aggattatgg      180
gaatatacac atatacactt tgtgtgcatt tcagtgtttt taaaacatta aaatttttct      240
ttttttcttt tcttttcttt tctctctctc tttctttctt tctttctttc tttctttctt      300
tctttctttc tttctttctt tctttctttc tttctttctt tctttctttt gcttgtcttg      360
gatagatact tcaatgaagg tctgcatgct tcta                                     394
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<210> 39

<211> 344

<212> DNA

<213> Canis familiaris

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<221> misc_feature

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<223> n is any nucleotide

<400> 39

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agaaagaaag aaagaaagaa agaaagaaag aaagaaagaa agaaagaaag aaagaaagaa      120
actctagaca gaagagatta tccacaaatt gatacaattt gggatataag attggnagaa      180
ggtttcttat aagaacaata ctagaaaata ttaatatatt taaggaattc aaagggaaag      240
tttctaacaa gcaattgaac acaggttatg gtaacacatg ctggttaatt gtaaatttga      300
ttaactggca tgttattagg aatgcttact tgtttggaga ctaa                                     344
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<211> 334

<212> DNA

<213> Canis familiaris

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<221> misc_feature

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<223> n is any nucleotide

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ctatatatct cattttctag tccccagtct agttcactgc ccgcctgacc aacatccacc      120
agtgatagtg aaaaattaaa gaaaaacctg nncaaataaa taaataaata aataaatgaa      180
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tgaatgaaaa aaagaaagaa agaaagaaaag aaagaaagaa agaaagaaaag aaagaaagaa 240
 agaaagaaaag aaagaaagaa agaaaggaaa gagacctgtn ccgaattaaa tcaccagact 300
 gggggagggcc tntctgtgat atgaaaataa ctga 334

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 <223> n is any nucleotide

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 caaaaataaaa taaataaata aataaataaa taaataaata aataaataaa taaataaaaa 120
 aaaattttctc tctaggattt tcccctacca gtttggtggt taattcctgg gagaggagca 180
 cattcccgtc tagnagcaca ttctag 206

<210> 42
 <211> 460
 <212> DNA
 <213> Canis familiaris

<400> 42
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 gtctgcagg cacgcacagg gggaccccaa gcgaacacct tcagacctca ctcatgtatg 180
 acgggtatga tgtctttgtg gcagggttat gactgggggg ttaacagagc tcctgtcatg 240
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 agattctctc ttctctctcc tctctctc ccttggtgtt tctctttctt gaatgaatga 360
 atgaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga aagaaagaaa gaaaatttat 420
 aagggaagaa atttttatat catagggttc ctagaacagg 460

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 <212> DNA
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 <221> misc_feature
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<400> 43
tgattgttca tgcaaaaagt aattgctcag cgcctgccac atatcaagca tcgctttgag      60
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aaccggttgt gatttctggg ccaaattatc caaaaataaa taaataaata aataaataaa      180
taaataaata aataaataaa agatgtcact aatgacacag aaatggagga taagactttc      240
ctgggtctaaa aaaaagatca agaacaaacc ataataaatg ccaaattgtg ctatactgag      300
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<210> 44
<211> 388
<212> DNA
<213> Canis familiaris

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<400> 44
taactctgaa aacaactcaa agactggcag aagagcctct ccacctttga acatagatgg      60
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aagttcattt gttctttctt tcttccttct tttttcttct ttctttcttt ctttctttct      180
ttctttcttt ctttctttct ttctttcttt ctctttcttt cttccttctt tcctttattt      240
aaagatttta tttattttatt tatttatata tggaggaaga ggcagaggag agggagaggg      300
ataagcagac tctgtactga atatggagcc agaattgagg gtggatccct aaccctgggg      360
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<212> DNA
<213> Canis familiaris

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<220>
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<223> n is any nucleotide

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ggaagaaagg aagaaagaaa gaaaggaaga aagaaagagt gtgccaaact gccctgatgt      180
cagtagnatc agtctacatg aagtaatgac ccgaactgaa accctaaacc catatggcta      240
gtagaatatc tgtggttaat aatgtttatg taatccaaat aaagttaatg ggtttttagga      300
cgattcccag ggtagttaa ggncaangag aattaatttg ggatntga                                  348

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<210> 46
 <211> 497
 <212> DNA
 <213> Canis familiaris

<400> 46
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 caatgaggaa cttgccttct gcagaaggct ggaatcctgt ttaataattt gtgtttaaga 120
 aggcatcaaa ttagagaatg tattttatta aaacgcacat gaaaatagtc actccaaaaa 180
 agattagtgc tgaaggagat atatcaacat tttacttttg ttcccacagc tcaggttgtg 240
 atctcagact catgatatca agaccacat caggctcttt gctcagtgtc aagtctcttt 300
 aagtttctct ttcctctgc tctcccccac gtgcatactc tctctactgt cttgctctct 360
 ctcaaataaa taaataaata aataaataaa taaataaata aataaatcta tctttaaaaa 420
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 atcaatgaca agccttt 497

<210> 47
 <211> 251
 <212> DNA
 <213> Canis familiaris

<400> 47
 tagtttgtcc tgattatgac ccacacaaaa gccacgaac tagcatttgg ctaatgtgtc 60
 tctcaagccg gttttgtaac aaatctcct ctcctcctct ttttttttat ttttttctga 120
 tgttatttgt ttttatttat ttatttat ttatttat ttatttat ttatttat 180
 ttattttgat attatttggt aaataaagaa gttagggtcat gtggtctgta gatctcccca 240
 ttctggatcc a 251

<210> 48
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 <213> Canis familiaris

<220>
 <221> misc_feature
 <222> (1)..(346)
 <223> n is any nucleotide

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 tagattagat ctcaggcagt tacaagcagt gattagagtt atcttatata aaaaaaaga 120
 aaaaaagaaa gaaagaaaaa gaagaaagaa agaaagaaag aaagaaagaa agaaagaaag 180
 aaagaaagaa gaaagataaa atggntttgc caatcagaaa atnttttgct cagcagaana 240

taaagaaaaa gagagtcata gaggnaagca ttgncgaggt gcactgntta gagaatgcct 300

aggncctgag ccacacccta ccaggaccta gangctccac ccnggnaggt 350

<210> 49

<211> 376

<212> DNA

<213> Canis familiaris

<220>

<221> misc_feature

<222> (4)..(4)

<223> n is any nucleotide

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tatnccatca gagaagataa agcaattctc aaaaattgga ataattggaa taagaccata 60

aaacaaccca aagacataca aaaaagagaa agaagaaaga aagaaagaaa gaaagaagaa 120

agaaagaaag aaagaaagaa agaaagaaag aaagaaagaa gaaagaaaga aagagaaaaa 180

gaaaaagaaa aagaaaaaga aaaagaaaaa gaaaagaaaa agaaaaaaaag attcgaggag 240

agattaatga cttagaacac agaaaataga ataaataaat ctggaagctt ctgtttcttt 300

ttacactgtc agggaatatg ccacagacaa ggagagggga agtcaatatt taattccgga 360

atcacaacgt tcccc 376

<210> 50

<211> 299

<212> DNA

<213> Canis familiaris

<220>

<221> misc_feature

<222> (101)..(101)

<223> n is any nucleotide

<400> 50

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ctccctctga aagaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga aagaaagaaa 180

gaaagaaaga aagaaaaaag agtaagtata gacctagaaa acgagattcc tattccactt 240

tcattatggt atggagaagt tcagtcctctt aggggtaaag tttgtctttg ggaggctga 299

<210> 51

<211> 475

<212> DNA

<213> Canis familiaris

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 ttatTTTTTT tatatTTTaa aatattgcaa taaatattac ttgtttactg aggtgtcttt 180
 ttttattggt gttgttggtg ttgttggtgt tgttggtggt gttgtmntga catcgctcc 240
 aaaacgaaga cttcacttgc ttcattctaa ttctgggtn gtgatatttg gnccccagat 300
 taaatttaaa aatgctgaat aaatttctaa atcacagccc ttgaatatga acaatgacac 360
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24